

PERSONALIZED ONLINE TRAINING PROGRAMS

by the discoverers!

- I. Advanced literature handling and fundamentals of data mining**
- II. Basic user-end bioinformatics**
- III. Genomics**
- IV. Transcriptomics**
- V. Proteomics**

Online courses on any other specific bioinformatics analysis (e.g., ChIP-Seq data-analysis, miRNA data-analysis) can also be conducted on request.

Please email at messenger@shodhaka.com

Contact sessions (skype or google-hangout can be used for online classes).

A mutually convenient date and time shall be decided by the communication between the trainee and trainer, for each session.

The duration, number of sessions & fees shall be decided based on a basic simple assessment in the beginning.

The prices are quoted for each participant. Discounts may be provided for group participants.

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I. Advanced literature handling and fundamentals of data mining

Beneficial to every researcher and student

Contents:

- Purposes of literature search and suitability of search engines
(You will get the first hand insights by our original research of a systematic comparative analysis of about 40 search engines for various purposes)
- Component and equivalent identification, using search fields and history options
- Search strategies and case studies
- Extracting information from research papers, reviews and case studies
- Biocuration for specific data mining and case studies

Total duration:

Contact sessions: Multiple short sessions of 15 to 60 minutes each, depending on what you already know
Expected practice and assignment hours: 3 - 10 hours

FEES:

Rs. 3,000 (~USD 45) to Rs. 8, 000 (~USD 125) for each contact session for each participant, depending on prior knowledge and expertise.

II. Basic user-end bioinformatics

Beneficial to all biologists from any specialization – particularly those using molecular biology approaches in their research

Contents:

- Basics: types of activities in the area and expertise needed to begin each specialization
- Basic gene and protein information retrieval for molecular biology experiments and interpretation of experimental analysis (e.g., *primer/probe designing, disease association, SNPs, sequence, structure, function*)
- Sequence analysis for specific purposes
- Algorithms in sequence analysis & case studies
- Gene and promoter prediction methods
- Repeat element analysis
- Microarray data analysis basics
- Systems biology basics
- Databases and types, software designing and developing new algorithms (overview)

Total duration:

Contact sessions: 6 to 25 sessions of 40 to 60 minutes each

Expected practice and assignment hours: 12 x 3 hours (36 hours)

FEES:

Rs. 3,000 (~USD 45) or 10,000 (~USD 150) for the complete module for each participant, depending on the prior knowledge and expertise.

III. Genomics**Contents:**

- Genome projects
- NGS: *de-novo* and reference based data analysis
- SNPs and databases: data access and retrieval
- Metagenomics
- Exome analysis overview

Total duration:

Contact sessions: 5 to 10 sessions of 40 to 60 minutes each

Expected practice and assignment hours: 12 - 15 hours

FEES:

Rs. 8,000 (~USD 115) to 15,000 (~USD 220) for the complete module for each participant, depending on prior knowledge and expertise.

IV. Transcriptomics

Contents:

- Microarray technology and 'R' package usage
- RNA-seq analysis
- Non-coding RNA analysis
- EST and other data comparisons

Total duration:

Contact sessions: 5 to 10 sessions of 40 to 60 minutes each
Expected practice and assignment hours: 10 - 12 hours

FEES:

Rs. 8,000 (~USD 115) to 15,000 (~USD 220) for the complete module for each participant, depending on prior knowledge and expertise.

V. Proteomics

- Protein interaction studies
- Pathway analysis
- Gene Ontology studies
- Homology modeling
- Molecular docking

Total duration:

Contact sessions: 5 to 10 sessions of 40 to 60 minutes each
Expected practice and assignment hours: 10 - 12 hours

FEES:

Rs. 8,000 (~USD 115) to 15,000 (~USD 220) for the complete module for each participant, depending on prior knowledge and expertise.